DEPRECIATION and AMORTISATION

CH 5

"What you do makes a difference, and you have to decide what kind of difference you want to make."

CONCEPT OF DEPRECIATION

Property, plant and equipment are tangible items that:
(a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and
(b) are expected to be used during more than a period of 12 months.

It is necessary that part of the acquisition cost of the fixed assets is treated or allocated as an expense in each of the accounting period in which the asset is utilized. The amount of fixed assets allocated in such manner to respective accounting period is called depreciation

Value of such assets decreases with passage of time mainly due to following reasons.

1. Wear and tear due to its use in business.
2. Efflux of time even when it is not being used.
3. Obsolescence due to technological or other changes.
4. Decrease in market value.
5. Depletion mainly in case of mines & other natural reserves.

Meaning of Depreciation

Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life. Depreciation starts from the day asset is available for use.

Depreciation on components of an assets

Each part of an item of Property, Plant and Equipment with a cost that is significant in relation to the total cost of the item should be depreciated separately.
An enterprise should allocate the amount initially recognised in respect of an item of asset to its significant parts/components and should depreciate each such part separately based on the useful life and residual value of each particular component.
For Example - Aircraft is a classic example of such an asset. The airframe (i.e. the body of the aircraft), the engines and the interiors have different individual useful lives.

OBJECTIVES FOR PROVIDING DEPRECIATION

True cost of production	The depletion of asset value due to usage should be charged in the account for determination of the true Cost of Production. This is done by charging depreciation.
Income measurement	Profits can be properly ascertained only after writing off the expense represented by the loss in value of Property, Plant & Equipment arising on their use.
True Position Statement	Original Cost of assets decreases due to many factors and hence assets cannot be presented at their original costs. The amount of accumulated

	depreciation is deducted there from to reflect in the Balance Sheet, a true and fair value of the Property, Plant & Equipment.
Funds for replacement	As the amount of depreciation charged in the P&L A/c is retained in the business (and not distributed as dividend), it goes on accumulating and eventually provides funds for replacement of Property, Plant & Equipment when their useful life is over.

FACTORS FOR DEPRECIATION

Assessment of depreciation & amount of depreciation are usually based on the following three factors

- **Historical Cost** or other amount substituted for the Historical Cost of the Asset when revalued.
- **Estimated Useful Life**
- **Estimated Residual Value**

These factors are explained as follows -

1. Historical Cost:

Purchase price	XX
Add : Other Non-refundable taxes & duties	XX
Add: Any directly attributable cost of bringing the asset to its working condition for its intended use. Example: Costs of site preparation, Initial delivery & handling costs, Installation and assemble costs, professional fees, etc.	XX
Add: Estimated dismantling, restoration costs	XX
Less: Trade discount & rebates	(XX)
Cost of Asset	XX

2. 'Useful Life' is either -
   (a) The period over which a depreciable asset is expected to be used by the enterprise, or
   (b) The number of production or similar units expected to be obtained from the use of the asset by the enterprise.

   Note :
   - Useful Life is generally shorter than the physical life of an asset.
   - 'Determination of the Useful Life of a depreciable asset is a matter of estimation and is normally based on various factors including experience with similar types of assets.

3. Residual/Scrap Value is the amount likely to be obtained by the disposal of the Fixed Asset at the end of its Useful Life.
   (a) If Residual Value of an asset is insignificant, it is normally regarded as Nil.
   (b) If Residual Value is significant, it is estimated either –
      (i) at the time of acquisition/installation, or
      (ii) at the time of subsequent revaluation of the asset.

DEPRECIABLE AMOUNT

'Depreciable Amount' of a Depreciable Asset is determined as under -

Particulars	Amount
Historical Cost, or other amount substituted for it in the Financial Statements	XX
Less: Estimated Residual Value	(XX)
Depreciable Amount	XX

Example :

An item of Machinery was purchased by A Ltd for ₹ 18 Lakhs. It can be sold for ₹ 2 Lakhs after 8 years, which is the useful life of the asset.

The Depreciable Amount of the machinery will be ₹ 18 Lakhs - ₹ 2 Lakhs = ₹ 16 Lakhs.

Cost = 18L life = 8 years S.V. = 2L
Dep. Amt. = 18L - 2L = 16L

METHODS OF DEPRECIATION

1. Methods Available:

The following methods are available for computing and allocating the depreciable amount of an asset over its useful life -

1) ❖ Fixed Instalment or Straight Line Method
2) ❖ Reducing Balance or Written Down Value (WDV) Method,
3) ❖ Sum of Digits of Years Method
4) ❖ Machine Hour Method,
5) ❖ Production Units Method,
6) ❖ Depletion Method,

2. Selection of method:

The choice of a method is based on the type of asset, nature of its use, and circumstances prevailing in the business.

METHOD 1: FIXED INSTALMENT OR STRAIGHT-LINE METHOD (SLM)

(SLM) OR Original Cost Method

Meaning	➢ Under this method, an equal or constant amount of depreciation is written off from Depreciable Asset every year. ➢ Suitable for assets which generate equal utility during each year of its useful life. ➢ At the end of the useful life of the asset, the cost of the asset will be NIL or equal to its Residual Value / Scrap Value. ➢ Total Charge to P&L Account (Depreciation + Repairs & Maintenance): Unequal every year
Formula	Straight Line Depreciation = Cost of Asset Less Residual Value / Useful Life SLM Depreciation Rate = SLM Depreciation / Cost of Asset x 100
Example	X Ltd purchased a Machine costing ₹ 10 Lakhs, having a useful life of 5 years Its estimated Residual Value is ₹ 1 Lakh. Depreciation p.a. = (10L - 1L)/5 = 900000/5 = 180000 p.a. Dep. (%) = 180000/1000000 x 100 = 18%

SLM: Dep. →

WDV: Dep. ↘

Diminishing Balance Method

METHOD 2: REDUCING BALANCE / WRITTEN DOWN VALUE (WDV) METHOD

Meaning	➢ Depreciation Amount for each year is computed by applying a fixed % on the Opening Balance of the Asset (i.e. Diminishing Balance of the Asset.) ➢ Reducing Balance refers to the Written Down Value of the Asset, i.e. value of the asset as reduced by the depreciation upto the previous year. ➢ The value of the asset will never be extinguished, as it happens in SLM Method. ➢ Depreciation Rate is computed such that at the end of the useful life of the asset, the cost of asset will be equal to its Residual Value / Scrap Value. ➢ Total Charge to P&L Account (Depreciation + Repairs & Maintenance): More or Less Equal/constant/Uniform every year
Formula	WDV Depreciation Rate = $1 - \sqrt[n]{\frac{\text{Residual.Value}}{\text{Cost.of.Asset}}}$, where n = Useful Life.
Example	X Ltd purchased a machine costing ₹ 10 Lakhs, and has ascertained its WDV rate as 10% p.a. Depreciation amounts for the first three years will be as under

At Foundation Level WDV: Rate will always be given

Particulars	Year 1	Year 2	Year 3
Cost / Opening WDV	10,00,000	900000	810000
(-) Depreciation @10%	(100000)	(90,000)	(81000)
Closing WDV	900000	810000	729000

METHOD 3: SUM OF DIGITS OF YEARS METHOD

Dep. will decrease every year

Meaning	It is a variation of the WDV Method. Under this method, Depreciation Amount for each year is computed by applying the following formula -
Formula	Dep. = Depreciable Amt. x $\frac{\text{No.of years of balance useful life (including current year)}}{\text{Total of Digits of the Useful Life of the Asset (in years)}}$ → $\frac{n \times (n+1)}{2}$
Example	X Ltd purchased a machine costing ₹ 78 Lakhs, having a useful life of 5 years, and estimated Scrap Value ₹ 3 Lakhs. Depreciation amounts for the five years will be -

Life = 5

Digits → 1+2+3+4+5 => 15

$\frac{78-3}{5} = 15L$ SLM

Depreciable Amt = 78 - 3 = 75

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
Depreciation amount for the year	$75L \times \frac{5}{15}$	$75L \times \frac{4}{15}$	$75L \times \frac{3}{15}$	$75L \times \frac{2}{15}$	$75L \times \frac{1}{15}$
	1+2+3+4+5 => 15L	= 20L	= 15L	= 10L	= 5L

Denominator: $5 \times \frac{6}{2} = 15$

Note: Depreciation is calculated on the Depreciable Amt, i.e. Cost less Residual Value

Book value after 1 year = Cost = 78L − Dep. = (25L) = 53L

Example: (Sum of Digits of Years Method)
Original cost of Asset 35,00,000. Residual Value 2,00,000. Useful Life 10 Years.
Find book value of asset after 6 years and Depreciation for 7th year.

Denominator
1+2+3 ....+10
$= 10 \times \frac{11}{2} = 55$

Depreciation for 6 years : Alt. 1

Year 1 = $(35L - 2L) \times \frac{10}{55}$ = 600000
Year 2 = $33L \times \frac{9}{55}$ = 540000
Year 3 = $33L \times \frac{8}{55}$ = 480000
Year 4 = $33L \times \frac{7}{55}$ = 420000
Year 5 = $33L \times \frac{6}{55}$ = 360000
Year 6 = $33L \times \frac{5}{55}$ = 300000
2700000

Alt. 2

$\frac{33L}{55} \times (10+9+8+7+6+5)$
$= 33L \times \frac{45}{55}$ = 2700000

Book value after 6 years
3500000 − 2700000 = 800000

Dep. for 7th year
$= 33L \times \frac{4}{55}$ = 240000

METHOD 4: MACHINE HOUR METHOD

Meaning	In this method, Depreciation is computed based on the number of Machine Hours (rather than years). Where it is practicable to keep a record of the actual running hours of each machine, depreciation may be calculated on the basis of hours that the concerned machinery worked for. Under machine hour rate method of calculating depreciation, the life of a machine is not estimated in years but in hours. Thus depreciation is calculated after estimating the total number of hours that machine would work during its whole life.
Formula	Dep. = Depreciable Amt × $\frac{\text{No. of Machine Hours during the year}}{\text{Total Machine Hours during the entire useful life}}$
Example	X Ltd purchased a machine costing ₹ 23,00,000, having a Scrap Value of ₹ 2,30,000. The machine has a useful life of 20,700 machine hours distributed as under – • Years 1 to 3: 2,500 machine hours each, • Years 4 to 6: 2,000 machine hours each, and • Years 7 to 10: 1,800 machine hours each. In this case, Depreciation Amounts will be computed as under –

(2500 × 3) + (2000 × 3) + (1800 × 4) = 20700

Depreciable Amount = 2300000 − 230000 = 2070000

2070000 / 20700 = 100/hr

Dep. (Yr 1 to 3) = $2070000 \times \frac{2500}{20700}$ = 250000 p.a.

Dep. (Yr 4 to 6) = $2070000 \times \frac{2000}{20700}$ = 200000 p.a.

Dep. (Yr 7 to 10) = $2070000 \times \frac{1800}{20700}$ = 180000 p.a.

METHOD 5: PRODUCTION UNITS METHOD

Machine Hours → units

Meaning	Depreciation is computed based on the production / output quantity.
Formula	Dep. = Depreciable Amt x $\frac{\text{Production Quantity for the current year}}{\text{Total Estimated Production Quantity from the Machine}}$
Example	X Ltd purchased machine costing ₹25,00,000, having Scrap Value of ₹5,00,000. The machine is expected to produce 10,00,000 units of output as follows – • Years 1 & 2: 1,15,000 units each, • Years 3 to 7: 1,00,000 units each, and • Years 8 to 10: 90,000 units each. In this case, Depreciation Amounts will be computed as under – Dep. (Yr 1 & 2) = 20,00,000 × 1,15,000 / 10,00,000 = 2,30,000 p.a. Dep. (Yr 3 to 7) = 20,00,000 × 1,00,000 / 10,00,000 = 2,00,000 p.a. Dep. (Yr 8 to 10) = 20,00,000 × 90,000 / 10,00,000 = 1,80,000 p.a.

Depreciable Amount
=> 25L - 5L
=> 20L

20L / 10L units = 2 unit

METHOD 6: DEPLETION METHOD

→ Decline / Reduction (Wasting Assets)

Meaning	➢ Depletion means reduction or exhaustion. ➢ This method is used in the case of Mines, Quarries, Oil Well, etc. containing only a certain estimated quantity of resources / products. ➢ Natural resources include physical assets like mineral deposits, oil and gas resources and timber. These natural resources exhaust by exploitation.
Formula	Dep. = Depreciable Amt x $\frac{\text{Quantity of Mineral / Oil extracted during current year}}{\text{Total Estimated Quantity from the Mine / Quarry / Well}}$
Example	X Ltd took a quarry on lease by paying ₹ 75,00,000. As per technical estimate, total quantity mineral deposit is 1,00,000 tones. Extraction pattern is given as: • Year 1: 6,000 tones, • Years 2 to 5: 15,000 tones each, and • Years 6 & 7: 17,000 tones each. In this case, Depreciation Amounts will be computed as under – Dep. (Year 1) = 75L × 6000/1L = 4,50,000 Dep. (Yr 2 to 5) = 75L × 15000/1L = 11,25,000 p.a. Dep. (Yr 6 & 7) = 75L × 17000/1L = 12,75,000 p.a.

ACCOUNTING ENTRIES FOR DEPRECIATION

Depreciation can be recorded in the books of account, under 2 approaches, which are described below –

Method	Method 1 Asset Credit Method	Method 2 Provision for Depreciation Method
Journal Entry	Depreciation A/c Dr. To Fixed Asset A/c Profit and Loss A/c Dr. To Depreciation A/c	Depreciation A/c Dr. To Provision for Depreciation A/c Profit and Loss A/c Dr. To Depreciation A/c
Provision for Depreciation A/c	There is no Provision for Depreciation Account at all.	Depreciation for each year is credited to Provision for Depreciation A/c, which shows the Accumulated Dep. on the Asset.
Effect on Asset A/c	Asset A/c is shown at Historical Cost less Depreciation. So, balance in Asset A/c is reduced year after year.	Asset is shown in the books at Original Cost. Net Book Value = Original Cost less Accumulated Depreciation thereon.

Note: The above schemes are applicable to SLM and WDV Methods. The same treatment is also applicable under –
(a) Sum of Digits, (b) Machine Hours, (c) Production Units, and (d) Depletion Methods.

Example:
Original Cost of Machinery 1,00,000. Residual Value 10,000. Useful Life: 10 Years
Method: Straight Line Method
Show Presentation in Balance Sheet as both the approaches for first 2 years.

Approach 1 : Asset Credit Method

Depreciation (SLM) = (1,00,000 − 10,000) / 10 = 9000

Year 1

1st day:

Machinery A/c -Dr 1,00,000
To Bank A/c 1,00,000

Last day:

Depreciation A/c -Dr 9000
To Machinery A/c 9000

P&L A/c -Dr 9000
To Depreciation A/c 9000

Machinery A/c

To Bank	1,00,000	By Dep.	9000
		By Bal c/d	91000
To Bal b/d	91000	By Dep.	9000
		By Bal c/d	82000

Year 2

Last day:

Depreciation A/c -Dr 9000
To Machinery A/c 9000

P&L A/c -Dr 9000
To Depreciation A/c 9000

B/S

Liabilities	1	2	Assets	1	2
			Machinery	91000	82000

CHANGE IN COST AND RESIDUAL VALUE / LIFE OF ASSET

CHANGE IN HISTORICAL COST

The Historical Cost of a depreciable asset may undergo subsequent changes arising as a result of increase or decrease in long term liability on account of —

(a) Exchange Rate Fluctuations,
(b) Price Adjustments,
(c) Changes in duties, or
(d) Other similar factors.

When the Historical Cost of an asset has undergone a change due to the above circumstances the depreciation on the revised unamortised depreciable amount is provided prospectively over the residual useful life of the Asset.

Example

X Ltd has an equipment purchased 2 years ago for 3,80,000. The residual value of asset was estimated to be 20,000. The total useful life of the asset when purchased was 12 years. The Company charges Straight Line Method of depreciation. Due to Price Adjustment, the cost of asset is now increased by 30,000. Calculate depreciation for the third year.

Dep. p.a. (For 1st 2 years) = $\frac{380000 - 20000}{12}$ = 30,000 p.a.

Book value after 2 years = 380000 − (30000 × 2) = 320000

Revised value = 320000 + 30000 = 350000

Dep. (From 3rd year) = $\frac{350000 - 20000}{10}$ = 33000 p.a.

12 − (2) = 10

CHANGE IN ESTIMATED USEFUL LIFE & SCRAP VALUE : Prospective Effect

The useful lives & scrap values of major depreciable assets or classes of depreciable assets may be reviewed periodically. The change should be accounted for as a change in an accounting estimate. Where there is a revision of the estimated useful life or scrap value of an asset, the unamortised depreciable amount should be charged over the revised estimate.

Example

A Machine costing ₹ 11,00,000 is depreciated on straight line basis, assuming 10 years working life & 1,00,000 residual value, for 3 years. The estimate of remaining useful life after 3rd year was reassessed at 5 years with 70,000 residual value. Calculate depreciation for the 4th year.

Dep. p.a. (For First 3 years) = $\frac{1100000 - 100000}{10}$ = 100000 p.a.

Book value / Carrying Amount after 3 years = 1100000 − (100000 × 3)
= 800000

Remaining life = 5 years Residual value = 70000

Dep. (From 4th year) = $\frac{800000 - 70000}{5}$ = 146000 p.a.

SLM ⟶ WDV
WDV ⟶ SLM

CHANGE IN METHOD OF DEPRECIATION

The depreciation method applied to an asset should be reviewed at least at each financial year-end and, if there has been a significant change in the expected pattern of consumption of the future economic benefits embodied in the asset, the method should be changed to reflect the changed pattern.

Whenever any change in depreciation method is made such change in method is treated as change in accounting estimate as per Accounting Standards.

Change in method of depreciation is applied with prospective effect. Hence, depreciation is recalculated in accordance with the new method from the date method is changed.

4 years : SLM
5th year : WDV

Example

A Machine costing ₹ 10,00,000 is depreciated on straight line basis, assuming 10 years working life for 4 years. After 4th year, method of straight line is changed to WDV method & depreciation rate is 12% p.a. Calculate depreciation for 5th year.

Dep. p.a. (For Ist 4 years) = $\frac{1000000 - 0}{10}$ = 100000 p.a.

Book value / Carrying Amt. after 4 years = 10L − (12 × 4) = 600000

Method changed from SLM to WDV : Rate : 12%

Dep. (5th year) = 600000 × 12% = 72000

(600000 − 72000) × 12% = 63360

REVALUATION OF DEPRECIABLE ASSETS

An enterprise should choose Either Cost model, Or Revaluation model as its accounting policy and should apply that policy to an entire class of PPE.

If an item of PPE is revalued, the entire class of PPE to which that asset belongs should be revalued.

Class of PPE: A class of PPE is a grouping of assets of a similar nature and use in operations of an enterprise.

Examples of separate classes:

(a) Land (b) Buildings (c) Machinery (d) Ships (e) Motor Vehicles (f) Furniture & Fixtures (g) Aircraft (h) Office Equipment

Revaluations should be made with sufficient regularity to ensure that the carrying amount does not differ materially from that which would be determined using Fair value at the Balance Sheet date. It may be pertinent to note that revaluation of PPE is an accounting policy choice, and not mandatory under the accounting standards or the Companies Act, 2013

First Revaluation	Upward ↑	Use Revaluation Surplus (R/S)
	Downward ↓	Use P & L A/c
Subsequent Revaluation		

Case	1st	2nd	Ist	2nd
1	↑	↑	R/S	R/S
2	↓	↓	P & L	P & L
3	↑	↓	R/S	Use R/S 1st then P&L A/c
4	↓	↑	P & L	Use P&L 1st then Rev. Res. A/c

Machinery 60000
To Revaluation Res- 60000

Example: *(ICAI Study Material)*

A machine of cost ₹ 12,00,000 is depreciated straight-line assuming 10 year working life and zero residual value for three years. At the end of third year, the machine was revalued upwards by ₹ 60,000 the remaining useful life was reassessed at 9 years.
Calculate depreciation for the fourth year.

Dep. p.a. (For 1st 3 years) = $\frac{1200000 - 0}{10}$ = 120000 p.a.

Book value / Carrying Amt. after 3 years = 1200000 - (120000 × 3)
= 840000

Revalued Amount = 840000 + 60000 = 900000

Remaining life = 9 years

Dep. p.a. (From 4th year) = $\frac{900000}{9}$ = 100000 p.a.

RELATED MATTERS

Non Imp.

CESSATION OF DEPRECIATION

Dep. Lagani Band karni hai / Nahi Lagani

Depreciation ceases to be charged

A) When asset's residual value exceeds its carrying amount

The residual value of an asset may increase to an amount equal to or greater than its carrying amount. If it does, depreciation charge of the asset is zero unless and until its residual value subsequently decreases to an amount below its carrying amount.

B) At the earlier of:

- The date that the asset is retired from active use and is held for disposal, or
- The date that the asset is derecognized. (Disposal)

Non Imp.

RETIREMENT

(Example)

Asset is retired from active use & held for disposal

❖ It is to be recorded in the books at Carrying Amount or NRV, whichever is lower.

❖ Any expected loss is recognized immediately in the P&L statement.

SALE / DISPOSAL OF DEPRECIABLE ASSETS

Sale/Disposal of Depreciable Assets in dealt with in the following manner —

1. Ascertain Depreciation for the year (upto date of disposal) & charge the same for that year.
2. Determine Net Book Value" (or) Written Down Value of the Asset = Historical Cost less Depreciation till date, including depreciation upto the date of disposal.
3. Compare Net Book Value of Asset with its Disposal Value and ascertain Profit / (Loss) on disposal & thereafter transfer the Profit / (Loss) on disposal to the Profit and Loss Account.

Example:

Cost of Machine purchased on 1st January, 2018 = ₹ 75 Lakhs, Useful Life = 7 years. Estimated Residual Value = ₹ 5 Lakhs,

Year: Jan to Dec.

The Company adopts original cost method (SLM) of Depreciation. On 30th June, 2020, the Machine was sold for 53,00,000. Prepare:-

A) Machinery Account

B) Machinery Account , Provision for Depreciation Account & Asset Disposal Account

Dep. p.a. = $\frac{75L - 5L}{7}$ = 10 Lakhs p.c.

A) Machinery A/c

1/1/18	To Bank A/c	75		31/12/18	By Depreciation	10	
					By Bal c/d	65	
		75				75	
1/1/19	To Bal b/d	65		31/12/19	By Depreciation	10	
					By Bal c/d	55	
		65				65	
1/1/20	To Bal b/d	55		30/6/20	By Depreciation (10L x 6/12)	5	
30/6	To Profit on Sale (P&L A/c)	3		30/6	By Bank A/c (Sale)	53	
		58				58	

Entry: ① ② → For Ledger Posting

Bank A/c -Dr		53	Bank A/c -Dr		53
To Machinery		50	To Machinery		53
To Profit on Sale		3	Machinery A/c -Dr		3
			To Profit on Sale		3

Normal Course : Prepare Machinery Disposal A/c [Ques. specify]

Machinery A/c

1/1/20	To Bal b/d	55	30/6	By Dep.	5
			30/6	By Machinery Disposal A/c	50
		55			55

Machinery Disposal A/c

30/6	To Machinery	50	30/6	By Bank A/c	53
	To P&L A/c (Profit)	3			
		53			53

INTANGIBLE ASSETS

An intangible asset is an identifiable non-monetary asset, without physical substance, held for use in the production or supply of goods or services, for rental to others, or for administrative purposes.

Examples of intangible assets include:

(a) Streaming rights of movies / TV shows / web series on platforms like Netflix, Disney Hot Star, Amazon Prime / Sony LIV etc.
(b) Broadcasting rights of events such as the Cricket World Cup, the Indian Premier League, the Pro Kabaddi League etc.
(c) Landing rights / time slots at airports which permit aircrafts to land or take-off during a particular time frame
(d) Patents
(e) Trademarks
(f) Copyrights
(g) Distribution rights for motion pictures in theatres
(h) Customer data collected by the entities such as customer contact numbers / email IDs and spending data at stores like Pantaloons, Westside etc. could be a major intangible asset for these entities.
(i) Goodwill (purchased)
(j) Computer Software

Intangible assets comprise a major portion of the balance sheet. It may be noted that it can also be the case that intangible assets could make the entities far more valuable than the tangible assets.

Intangible assets can be recognized in the financial statements provided they meet the following conditions:

(i) The intangible asset is identifiable.
(ii) The enterprise can exercise control over such intangible asset.
(iii) It is probable that the future economic benefits attributable to the asset will flow to the enterprise; and
(iv) The cost of the intangible asset can be measured reliably.

Cost of Intangible Assets include the following:

Purchase price	XX
Add: Non-refundable taxes & duties	XX
Add: Directly attributable expenditure on making the asset ready for its intended use.*	XX
Less: Trade discount & rebates	(XX)
Cost of Asset	XX

*Example: Professional fees for legal services

Derecognition

An intangible asset should be derecognized (eliminated from the balance sheet) on disposal or when no future economic benefits are expected from its use and subsequent disposal. Gains or losses arising from the retirement or disposal of an intangible asset should be determined as the difference between the net disposal proceeds and the carrying amount of the asset and should be recognised as *income or expense in the statement of profit and loss*.

Difference between Tangible and Intangible Assets

These are assets that have a physical substance i.e., they can be seen and touched, held for use in the production or supply of goods or services, for rental to others, or for administrative purposes.	These are identifiable assets that do NOT have a physical substance, held for use in the production or supply of goods or services, for rental to others, or for administrative purposes.
Tangible Assets have a finite life based on expected usage.	Intangible Assets have a finite life based on contractual terms. In some cases, intangible assets could also have an indefinite life e.g. purchased goodwill.
Useful life is based on expected usage, with no presumption laid down for the same.	Useful life of Intangible Assets is presumed not to exceed 10 years unless evidence exists to the contrary
Tangible Assets are depreciated over the useful life. In other words, writing off the value of tangible assets on an annual basis is known as depreciation.	Intangible Assets are amortised over the useful life. In other words, writing off the value of intangible assets on an annual basis is known as amortisation.
Examples incl. Property, Machinery, Vehicles etc.	*Examples* incl. software, streaming rights, landing rights, trademarks, patents etc.

AMORTISATION

Amortisation can be defined as 'the systematic allocation of the depreciable amount of an intangible asset over its useful life'.

Depreciable amount is the cost of an asset less its residual value.

The concept of amortisation in case of intangible assets is similar to the concept of depreciation in case of tangible assets. In other words, 'depreciation of an intangible asset' is called AMORTISATION.

Useful Life

Amortisation should commence when the asset is available for use. It is presumed that the useful life of an intangible asset will not exceed ten years from the date when the asset is available for use unless evidence exists to the contrary.

For instance, given the rapid changes in technology, computer software and many other intangible assets are susceptible to technological obsolescence. Therefore, it is likely that their useful life will be short. Similarly, intangible assets with contractual rights for a period exceeding ten years, will be amortised over such extended period rather than the presumed period of ten years.

Amortisation Method

The amortisation method used should reflect the pattern in which the asset's economic benefits are consumed by the enterprise. If that pattern cannot be determined reliably, the straight-line method should be used.

The amortisation period and the amortisation method should be reviewed at least at each financial year end. If the expected useful life of the asset is significantly different from previous estimates, the amortisation period should be changed accordingly.

If there has been a significant change in the expected pattern of economic benefits from the asset, the amortisation method should be changed to reflect the changed pattern.

ASSIGNMENT QUESTIONS

Question 1 (ICAI Study Material) Pg no.____

Jain Bros. acquired a machine on 1st July, 2021 at a cost of ₹ 14,00,000 and spent ₹ 1,00,000 on its installation. The firm writes off depreciation at 10% p.a. of the original cost every year. The books are closed on 31st December every year.
Show the Machinery Account and Depreciation Account for the year 2021 and 2022.

Question 2 (ICAI Study Material) Pg no.____

M/s Akash & Co. purchased machine for ₹ 10,00,000. Estimated useful life & scrap value were 10 years & ₹ 1,20,000 respectively. The machine was put to use on 1.1.2017. Show Machinery Account & Depreciation Account in their books for 2022 by using sum of years digits method.

Question 3 (ICAI Study Material) Pg no.____

A firm purchased on 1st January, 2020 certain machinery for ₹ 5,82,000 and spent ₹ 18,000 on its erection. On July 1, 2020 another machinery for ₹ 2,00,000 was acquired.
On 1st July, 2021 the machinery purchased on 1st January, 2020 having become obsolete was auctioned for ₹ 3,86,000 and on the same date fresh machinery was purchased at a cost of ₹ 4,00,000. Depreciation was provided for annually on 31st December at the rate of 10% p.a. on written down value. Prepare Machinery Account.

Question 4 Pg no.____

Mr. X purchased 10 trucks at ₹ 9,00,000 each on 1st April 2018. On October 1st, 2020, one of the trucks is involved in an accident and is completely destroyed and ₹ 5,40,000 is received from the insurance in full settlement. On the same date another truck is purchased by the company for the sum of ₹ 10,00,000. The company write off 20% on the original cost per annum. The company observe the calendar year as its financial year. Give the motor truck account for two year ending 31 Dec, 2021.

Question 5 (ICAI Study Material) Pg no.____

The Machinery Account of a factory showed a balance of ₹ 19,00,000 on 1st January, 2022. Its accounts were made up on 31st December each year and depreciation is written off at 10% p.a. under the Diminishing Balance Method. On 1st June 2022 a new machinery was acquired at a cost of ₹ 2,80,000 and installation charges incurred in erecting the machine works out to ₹ 8,920 on the same date. On 1st June, 2022 a machine which had cost ₹ 4,37,400 on 1st January 2020 was sold for ₹ 75,000. Another machine which had cost ₹ 4,37,000 on 1st January, 2021 was scrapped on the same date and it realised nothing.
Write Machinery account for the year 2022 allowing the same rate of depreciation as in the past, calculating depreciation to the nearest multiple of a Rupee.

Question 6 (RTP Nov 2018) / (Nov 2019) / (Nov 2020) / (May 2021) & (May 2022) (Similar) Pg no.____

M/s. Green Channel purchased a second-hand machine on 1st January, 2018 for ₹ 1,60,000. Overhauling and erection charges amounted to ₹ 40,000. Another machine was purchased for ₹ 80,000 on 1st July, 2018.
On 1st July, 2020, the machine installed on 1st January, 2018 was sold for ₹ 1,00,000. Another machine amounted to ₹ 30,000 was purchased and was installed on 30th September, 2020. Under the existing practice the company provides depreciation @ 10% p.a. on original cost. However, from the year 2021 it decided to adopt WDV method and to charge depreciation @ 15% p.a. You are required to prepare Machinery account for the years 2018 to 2021.

Question 7 *(ICAI Study Material)* Pg no._____

M/s Anshul & Co. commenced business on 1st January 2017, when they purchased plant and equipment for ₹ 7,00,000. They adopted a policy of charging depreciation at 15% per annum on diminishing balance basis and over the years, their purchases of plant have been:

Date	Amount ₹
1-1-2018	1,50,000
1-1-2021	2,00,000

On 1-1-2021 it was decided to change the method and rate of depreciation to straight line basis. On this date remaining useful life was assessed as 6 years for all the assets purchased before 1.1.2021 with no scrap value and 10 years for the asset purchased on 1.1.2021.

Prepare Plant and Equipment Account for the year ending 31st December, 2021.

Question 8 *(CA Foundation July 2021) (4 Marks)* Pg no._____

The balance of Machinery Account of a firm on 1st April, 2020 was ₹ 28,54,000. Out of this, a plant having book value of ₹ 2,16,000 as on 1st April, 2020 was sold on 1st July, 2020 for ₹ 82,000. On the same date a new plant was purchased for ₹ 4,58,000 and ₹ 22,000 was spent on its erection. On 1st November, 2020 a new machine was purchased for ₹ 5,60,000. Depreciation is written off @ 15% per annum under the diminishing balance method.

Calculate the depreciation for the year ended 31st March, 2021.

Question 9 *(CA Foundation Dec 2021) (5 Marks)* Pg no._____

On 1st January, 2019 Kohinoor Transport Company purchased a Bus for ₹ 8,00,000. On 1st July, 2020 this bus was damaged due to fire and was completely destroyed and ₹ 6,00,000 were received by a cheque from the Insurance Company in full settlement on 1st October, 2020. On 1st July, 2020 another Bus was purchased by the company for ₹ 10,00,000. The Company charges Depreciation @ 20% per annum under the WDV Method.

Calculate the amount of depreciation for the year ended 31st March, 2021 and gain or loss on the destroyed Bus.

Question 10 *(ICAI Study Material)* Pg no._____

On April 1, 2019 Shubra Ltd. purchased a machinery for ₹ 12,00,000. On Oct 1, 2021, a part of the machinery purchased on April 1, 2019 for ₹ 80,000 was sold for ₹ 45,000 and a new machinery at a cost of ₹ 1,58,000 was purchased and installed on the same date. The company has adopted the method of providing 10% p.a. depreciation on the written down value of the machinery.

Show necessary ledger accounts for the years ended 31st March 2020 to 2022 assuming that

(a) 'Provision for Depreciation Account' is not maintained

(b) Provision for Depreciation Account is maintained.

Question 11 *(CA Foundation June 2023) (10 Marks)* Pg no._____

The following balances appear in the books of Dheeraj Enterprises:

	₹
Machinery account as on 01.04.2021	12,00,000
Provision for depreciation account as on 01.04.2021	4,65,000

On 1st October, 2021 the Machinery which was purchased on 1st April, 2018 for ₹ 2,00,000 was sold for ₹ 1,10,000 and on the same date another Machinery was purchased for ₹ 4,80,000. The firm has been charging depreciation at 10% p.a. on written down value of the Machinery every year.

Prepare the Machinery account, Provision for Depreciation account and Machinery disposal account for the year ending 31st March, 2022.

Question 12 *(ICAI Study Material)* *Pg no.*_____

A firm's plant and machinery account at 31st December, 2021 and the corresponding depreciation provision account, broken down by year of purchase are as follows:

Year of Purchase	Plant and Machinery at cost	Depreciation Provision
2005	2,00,000	2,00,000
2011	3,00,000	3,00,000
2012	10,00,000	9,50,000
2013	7,00,000	5,95,000
2020	5,00,000	75,000
2021	3,00,000	15,000
	30,00,000	21,35,000

Depreciation is at the rate of 10% per annum on cost. It is the Company's policy to assume that all purchases, sales or disposal of plant occurred on 30th June in the relevant year for the purpose of calculating depreciation, irrespective of the precise date on which these events occurred.

During 2022 the following transactions took place:

1. Purchase of plant and machinery amounted to ₹ 15,00,000
2. Plant that had been bought in 2011 for ₹ 1,70,000 was scrapped.
3. Plant that had been bought in 2012 for ₹ 90,000 was sold for ₹ 5,000.
4. Plant that had been bought in 2013 for ₹ 2,40,000 was sold for ₹ 15,000.

You are required to:

Calculate the provision for depreciation of plant and machinery for the year ended 31st December, 2022. It is company's policy to show any profit or loss on the sale or disposal of plant as a completely separate item in the Profit & Loss Account. You are also required to prepare the following ledger accounts during 2022.

(i) Plant and machinery at cost; (ii) Depreciation provision;
(iii) Sales or disposal of plant and machinery.

Question 13 *(ICAI Study Material)* *Pg no.*_____

Kumar R&D Co. registered a patent (the patent meets the criteria of an intangible asset) on 1st July, 2021 developed at a cost of ₹ 28,00,000 and spent ₹ 2,00,000 towards legal fees and registration. The patent is granted for a period of 10 years. The books are closed on 31st December every year.

Show the Patent Account and Amortisation Account for the year 2021 and 2022.

Question 14 *(ICAI Study Material)* *Pg no.*_____

Prime Streaming Co. acquired the streaming rights of a movie for ₹ 18,00,000 with the contracted duration of the streaming period being 10 years. At the beginning of the fourth year, based on the decline in viewership, Prime Streaming Co. decided to stream the movie only for the next 5 years. Calculate amortisation for the fourth year.

PRACTICE QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. The portion of the acquisition cost of the tangible asset, yet to be allocated is known as
   (a) Written down value
   (b) Accumulated value
   (c) Realisable value

2. The main objective of providing depreciation is to
   (a) Create secret reserve
   (b) Reduce the book value of assets
   (c) Allocate cost of the assets

3. Which of the following assets does not depreciate?
   (a) Machinery and equipment
   (b) Patents
   (c) Land

4. Obsolescence of a depreciable asset may be caused by:
   I. Technological changes.
   II. Improvement in production method.
   III. Change in market demand for the product or service output.
   IV. Legal or other restrictions.
   (a) Only (I) above
   (b) Both (I) and (II) above
   (c) All (I), (II), (III) and (IV) above

5. The number of production or similar units expected to be obtained from the use of an asset by an enterprise is called as
   (a) Unit life
   (b) Useful life
   (c) Production life

6. If the equipment account has a balance of ₹ 22,50,000 and accumulated depreciation account has a balance of ₹ 14,00,000, the book value of the equipment is
   (a) 36,50,000
   (b) 8,50,000
   (c) 14,00,000

7. In the case of downward revaluation of a plant which is for the first time revalued, the account to be debited is
   (a) Plant account
   (b) Revaluation Reserve
   (c) Profit & Loss account

8. Original cost = ₹ 12,60,000; Salvage value = Nil; Useful life = 6 years Depreciation for the first year under sum of years digits method will be
   (a) 3,60,000
   (b) 1,20,000
   (c) 1,80,000

9. Original cost of a machine was ₹ 25,20,000 salvage value was ₹ 1,20,000, useful life was 6 years. Annual depreciation under Straight Line Method
   (a) 4,20,000
   (b) 4,00,000
   (c) 3,00,000

10. The cost of a machine is ₹ 20,00,000. Two years later the book value is ₹ 10,00,000. The Straight-line percentage depreciation is
   (a) 50%
   (b) 33-1/3%
   (c) 25%

11. Original cost ₹13,00,000, Salvage value ₹ 40,000, Useful life 6 years. Depreciation for the first year under sum-of-years digit methods will be
   (a) 60,000
   (b) 1,20,000
   (c) 3,60,000

12. A company purchased a machinery on April 01, 2016, for ₹ 15,00,000. It is estimated that the machinery will have a useful life of 5 years after which it will have no salvage value. The depreciation charged during the year 2020-21 was
   (a) 5,00,000
   (b) 4,00,000
   (c) 3,00,000

13. A plant with original cost of ₹ 50,00,000 was revalued after 2 years resulting in credit to Revaluation Surplus account of ₹ 4,00,000. Towards the year end of 2019-20, due to COVID-19 the plant value had gone down by ₹ 5,00,000 and accordingly management decided to revalue the same. What shall be the impact of this downwards revaluation on Profit & Loss Account?
   (a) Debit of ₹ 5,00,000
   (b) Debit of ₹ 1,00,000
   (c) Credit of ₹ 5,00,000
   (d) Credit of ₹ 1,00,000

14. A machinery with original cost of ₹ 10,00,000 and Nil Salvage value acquired on 1st April 2017 with 4 years useful life was depreciated using Straight Line Method. It was decided to sell the machinery on 1st October 2020 for ₹ 1,20,000. What shall be the gain or (loss) on the sale of Machinery?
   (a) Loss of ₹ 1,30,000
   (b) Gain of ₹ 1,20,000
   (c) Loss of ₹ 5,000
   (d) Gain of ₹ 5,000

15. In respect of intangible assets, there is a presumption that the useful life of an intangible asset will not exceed
   (a) 2 years
   (b) 3 years
   (c) 10 years

16. A company developed a technology to enhance the battery life of mobile phones. The cost of development have been capitalized as an intangible asset at ₹ 5,00,000. The company

estimates the life of the technology developed to be 3 years. The company has forecasted that 50% of sales will be in year 1, 35% in year 2 and 15% in year 3. What should be the amortisation charge in third year?

(a) ₹ 2,50,000
(b) ₹ 75,000
(c) ₹ 1,75,000

17. An intangible asset is an asset
(a) with no physical existence
(b) generated internally by the business
(c) cannot be sold

ANSWERS MCQs

1. (a)	2. (c)	3. (c)	4. (c)	5. (b)	6. (b)	7. (c)
8. (a)	9. (b)	10. (c)	11. (c)	12. (c)	13. (b)	14. (c)
15. (c)	16. (b)	17. (a)				

TRUE / FALSE

State with reasons whether the following are true or false:

1) Increase in market value of a fixed asset is one of the reasons for depreciation being charged.
2) Depreciation is a cash expenditure like other normal expenses.
3) Cost of property, plant and equipment includes purchase price, refundable taxes & import duties after deducting any discount or rebate.
4) Cost of fixed asset should also include cost of opening a new facility such as inauguration costs.
5) Depreciation is charged with a constant amount under straight line method and charged with a constant percentage under diminishing balance method.
6) In case an item of Property, Plant & Equipment is revalued, whole class of assets to which that asset being revalued belongs should be revalued.
7) In case the carrying amount of an asset is decreased due to revaluation, such decrease should always be recognized in the Profit and Loss account.
8) Akash purchased a machine for ₹ 12,00,000. Estimated useful life is 10 years & scrap value is ₹ 1,00,000. Depreciation for the 1st year using sum of the years digit method shall be ₹ 2,00,000.
9) Depreciation cannot be provided in case of loss, in a financial year.
10) Providing for depreciation also helps in providing for accumulation of funds to facilitate the replacement at the end of its useful life.
11) If the equipment account has a balance of ₹ 12,50,000 and the accumulated depreciation account has a balance of ₹ 4,00,000, the written down value of same shall be ₹ 16,50,000.
12) Sum of years digit method is an example of accelerated method of charging depreciation.
13) Over the life of an asset subject to depreciation, the accelerated method will result in less Depreciation Expense in early years and more depreciation in later years of its life.
14) While depreciating Land cost, Straight line method shall give more depreciation than the written down value.
15) Provision for depreciation account is debited at the time of recording the depreciation on an asset.
16) If adequate maintenance expenditure is incurred with relation to running repairs of an asset, we need not charge any depreciation.

17) When a property, plant or equipment is sold then provision for depreciation account is debited, asset account is credited & any gain or loss is recorded to profit and loss account.
18) While calculating the depreciation as per diminishing balance method, the salvage value of the asset at the end of its life is reduced from its cost.
19) Any change in the estimated useful life of an asset should be accounted for as a change in an accounting estimate in accordance with Accounting Standards.
20) An intangible asset is a non identifiable, non monetary asset.
21) There exists difference between the written down value method and diminishing balance method of depreciation.
22) The expressions depreciation is to be charged at 10% and 10% p.a. on furniture and fittings carry the same meaning.
23) Higher depreciation will not affect cash profit of the business.
24) Land is also a depreciable asset.
25) Whenever any depreciable asset is sold during the year, depreciation is charged on it for that entire year.
26) Depreciation is a process of allocation of the cost of fixed asset.
27) Depreciable amount refers to the difference between historical cost and the market value of an asset.
28) Reducing balance method of depreciation is followed to have a uniform charge for depreciation and repairs and maintenance together.
29) Depreciation is a non-cash expense and does not result in any cash outflow. *(Nov 2018)*

Solution

1) False: It is the decrease in market value as one of the reasons for depreciation. Increase in market value may result in Revaluation.
2) False: - Depreciation is not a cash expenditure like other normal expenses as it does not result in any cash outflow.
3) False: Non refundable taxes & duties form part of the cost.
4) False: Inauguration costs shouldn't be part of cost.
5) True: SLM method results in same amount and Diminishing method involves same rate of depreciation.
6) True: Revaluation should be done for the whole class of the asset.
7) False: Any decrease in value of asset on account of revaluation should be first debited to Revaluation Reserve, if any, and then to Profit & Loss account.
8) True: Sum of years digit method depreciation is calculated as 10/55 x (12,00,000 – 1,00,000) = 2,00,000
9) False: Depreciation is a charge against profit and not an appropriation of profit. Therefore, depreciation has to be provided for, even in case of loss in a financial year.
10) True: Depreciation being non cash expense reduces the distributable profits and hence facilitates replacement of asset when required.
11) False: WDV = ₹ 12,50,000 - ₹ 4,00,000 = ₹ 8,50,000
12) True: Higher depreciation is charged in earlier years under sum of the years digit method.
13) False: It is vice versa as under diminishing balance method; higher depreciation is charged in beginning.
14) False: Land is not depreciated.
15) False: Provision for Depreciation account is credited while charging the depreciation.
16) False: Depreciation is allocation of the cost of an asset over its useful life. Regular repairs may be required during its life are expensed and depreciation has to be charged anyways.
17) True: At the time of sale of an asset, respective asset a/c is credited with provision for depreciation a/c being debited & any resulting gain or loss being charged to P&L A/c.

18) False: Under diminishing balance method, salvage value is not considered initially as it assumes that at the end of the asset's life the remaining value shall be its salvage value.
19) True: Any change in useful life of an asset is accounted for as a change in estimate.
20) False: An intangible asset is an identifiable non-monetary asset, held for use in production and supply of goods and services.
21) False: - Both are same methods. Depreciation is computed by applying a fixed rate on the diminishing balance which is known as written down value.
22) False:- They differ on the basis of time factor. 10% p.a. implies that time factor is to be considered while calculating depreciation on prorate basis whereas simply 10% implies that time factor is immaterial for calculation.
23) True: - It is a non-cash expense and therefore will not affect cash profit of the business.
24) False: - Land is not a depreciable asset since it has unlimited life.
25) False: Whenever any depreciable asset is sold during the year, depreciation is charged on it for the period it has been used in the sale year.
26) True: - It is measure of wear and tear of an asset. On charging depreciation, the cost of fixed asset is allocated during the period it is used.
27) False: - Depreciation is allocated over the estimated useful life of the assets depreciated. Depreciable amount= [Historical Cost of the Asset]- [Residual or Scrap Value]
28) True - In the early periods of useful life of fixed assets, repairs and maintenance expenses are relatively low because the asset is new. Whereas in later periods, as the asset become old, repairs and maintenance expenses increase continuously. Under written down value method, depreciation charged is high in the initial period and reduces continuously in the later periods. Thus, depreciation and repair and maintenance expenses become more or less uniform throughout the useful life of the asset.
29) True: - Depreciation is a non-cash expense and it does not result in any outflow of cash.

DIFFERENCE BETWEEN STRAIGHT LINE METHOD (SLM) & WRITTEN DOWN VALUE METHOD

S.No.	Straight Line Method (SLM)	Written Down Value (WDV)
1.	Under SLM an equal amount is written off each year throughout the working life of the depreciable asset so as to reduce the cost of the asset to nil or to its scrap value at the end.	Under WDV, a fixed percentage is charged on the diminishing balance of the asset each year so as to reduce the value of the asset to its scrap value at the end of useful life
2.	Under this method, annual depreciation charge is equal throughout the life of the asset	Under this method, depreciation charge is reduced over the years as the asset grows old
3.	Under this method, the asset can be fully depreciated	Under this method asset can never be fully depreciated.
4.	Under this method the charge for depreciation is constant while repair charges increase with the life of the asset, so the total charge throughout the life of the asset will not be uniform	Under this method, depreciation charges become high in the initial years but generally repair remains low. As the asset grows old depreciation charge reduces but repair expenses increase. Thus under this method depreciation and repairs are more or less evenly distributed throughout life of the asset.

HOMEWORK QUESTIONS

Question 1 (ICAI Study Material) Pg no._____

A machine was purchased for ₹ 30,00,000 having an estimated total working of 24,000 hours. The scrap value is expected to be ₹ 2,00,000 and anticipated pattern of distribution of effective hours is :

Year 1 – 3	3,000 hours per year
Year 4 - 6	2,600 hours per year
Year 7 - 10	1,800 hours per year

Determine Annual Depreciation under Machine Hour Rate Method.

Question 2 (ICAI Study Material) Pg no._____

A machine is purchased for ₹ 20,00,000. Its estimated useful life is 10 years with a residual value of ₹ 2,00,000. The machine is expected to produce 1,50,000 units during its life time. Expected distribution pattern of production is as follows:

Year	Production
1-3	20,000 units per year
4-7	15,000 units per year
8-10	10,000 units per year

Determine the value of depreciation for each year using production units method.

Question 3 (ICAI Study Material) Pg no._____

M/s Surya & Co. took lease of a quarry on 1-1-2019 for ₹ 1,00,00,000. As per technical estimate the total quantity of mineral deposit is 2,00,000 tonnes. Depreciation was charged on the basis of depletion method. Extraction pattern is given in the following table:

Year	Quantity of Mineral extracted
2019	2,000 tonnes
2020	10,000 tonnes
2021	15,000 tonnes

Show the Quarry Lease Account and Depreciation Account for each year from 2019 to 2021.

Question 4 (ICAI Study Material) Pg no._____

Jain Bros. acquired a machine on 1st July, 2021 at a cost of ₹ 14,00,000 and spent ₹ 1,00,000 on its installation. The firm writes off depreciation at 10% p.a.. The books are closed on 31st December every year. Show the Machinery Account on diminishing balance method for the year 2021 and 2022.

Question 5 (CA Foundation Nov 2019) (4 Marks) Pg no._____

X purchased a machinery on 1st January 2020 for ₹ 4,80,000 and spent ₹ 20,000 on its installation. On July 1, 2020 another machinery costing ₹ 2,00,000 was purchased. On 1st July, 2021 the machinery purchased on 1st January, 2020 having become scrapped and was sold for ₹ 2,90,000 and on the same date fresh machinery was purchased for ₹ 5,00,000. Depreciation is provided annually on 31st December at the rate of 10% p.a. on written down value.
Prepare Machinery account for the years 2020 and 2021.

Question 6 (RTP May 2018) / (ICAI Study Material) Pg no._____

The M/s LG Transport purchased 10 trucks at ₹ 45,00,000 each on 1st April 2019. On October 1st, 2021, one of the trucks is involved in an accident and is completely destroyed and ₹ 27,00,000 is received from the insurance in full settlement. On the same date, another truck is purchased by the company for the sum of ₹ 50,00,000. The company writes off 20% on the

original cost per annum. The company observe the calendar year as its financial year.
You are required to prepare the motor truck account for two year ending 31 Dec, 2022

Question 7 (RTP Nov 2021) Pg no._____

The M/s Nishant Transport purchased 10 Buses at ₹ 15,00,000 each on 1st April 2017. On October 1st, 2019, one of the Buses is involved in an accident and is completely destroyed and ₹ 7,00,000 is received from the insurance in full settlement. On the same date, another truck is purchased by the company for the sum of ₹ 18,00,000. The company write off 10% on the original cost per annum. The company observe the calendar year as its financial year.
You are required to prepare the buses account for two year ending 31 Dec, 2020.

Question 8 (CA Foundation Jan 2021) (10 Marks) Pg no._____

M/s. Dayal Transport Company purchased 10 trucks @ ₹ 50,00,000 each on 1st July 2017. On 1st October, 2019, one of the trucks is involved in an accident and is completely destroyed and ₹ 35,00,000 is received from the insurance in full settlement. On the same date, another truck is purchased by the company for the sum of ₹ 60,00,000. The company writes off 20% of the original cost per annum. The company observes the calendar year as its financial year. Give the motor truck account for two years ending 31st December, 2020

Question 9 Pg no._____

M/s. Mohit Pharmaceuticals has imported a machine on 1st July, 2019, for Pound 2,000 paid custom duty and freight ₹ 20,000 and incurred erection charges ₹ 15,000. Another local machinery costing ₹25,000 was purchased on 1st Jan 2020. On 1st July, 2021, a portion of the imported machinery (value one-third) got out of order and was sold for ₹ 33,700. Another machinery was purchased to replace the same for ₹ 12,500. Depreciation is to be calculated at 20% p.a on cost. Show the machinery account for 2019, 2020, and 2021. Exchange rate is ₹ 80 per pound.

1 Pound = 80

2000 × 80 = 160000

Question 10 (CA Foundation June 2022) (10 Marks) Pg no._____

The Machinery Account of a Factory showed a balance of ₹ 95 Lakhs on 1st April,2020. The Books of Accounts of the Factory are closed on 31st March every year. Depreciation is written off @ 10% per annum under the Diminishing Balance Method. On 1st September,2020 a new machine was acquired at a cost of ₹ 14 Lakhs and ₹ 44,600 was incurred on the same day as installation charges for erecting the machine. On 1st September,2020 a machine which had cost ₹ 21,87,000 on 1st April,2018 was sold for ₹ 3,75,000. Another machine which had cost ₹ 21,85,000 on 1st April,2019 was scrapped on 1st September,2020 and it realized nothing. Prepare Machinery Account for the year ended 31st March,2021. Allow the same rate of depreciation as in the past and calculate depreciation to the nearest multiple of a rupee. Also show all the necessary working notes.

Question 11 Pg no._____

A firm purchased, on 1st January, 2017, certain machinery for ₹ 19,40,000 and spent ₹ 60,000 on its erection. On 1st July in the same year additional machinery costing ₹ 10,00,000 was acquired. On 1st July, 2019 the machinery purchased on 1st January, 2017 having become obsolete was auctioned for ₹ 8,00,000 and on the same data fresh machine was purchased at a cost of ₹ 15,00,000. Depreciation was provided for annually on 31st December at the rate of 10% per annum on the original cost of the asset. In 2020 however, the firm changed this method of providing depreciation and adopted the method of writing off 20% on the written down value. Give the Machinery Account as it would stand at the end of each year from 2017 to 2021.

Question 12 (CA Foundation May 2019) (10 Marks)/(RTP Nov 2022)/(RTP Nov 2023) Pg no._____

A Firm purchased an old Machinery for ₹ 37,000 on 1st January, 2018 and spent ₹ 3,000 on its overhauling. On 1st July 2019, another machine was purchased for ₹ 10,000. On 1st July 2020, the machinery which was purchased on 1st January 2018, was sold for ₹ 28,000 and the same day a new machinery costing ₹ 25,000 was purchased. On 1st July, 2021, the machine which was purchased on 1st July, 2019 was sold for ₹ 2,000. Depreciation is charged @ 10% per annum on straight line method. The firm changed the method and adopted diminishing balance method with effect from 1st January, 2019 and the rate was increased to 15% per annum. The books are closed on 31st December every year. Prepare Machinery account for four years from 1st January, 2018.

Question 13 (CA Foundation Dec 2022) (4 Marks) Pg no._____

A purchased a machinery for ₹ 1,30,000 on 1st April, 2019 and paid ₹ 20,000 for freight & installation charges. On 1st October, 2021 another machine was purchased for 50,000 and sold old machinery for ₹ 1,00,000. The machine purchased on 1st October, 2021 was installed on 1st January, 2022.

Under existing practice, the company is charging depreciation @ 20% p.a. on the original cost. However, from 1st April, 2021 it decided to adopt WDV method and charge depreciation @15% p.a. You are required to prepare Machinery Account from 1st April, 2019 to 31st March, 2022.

Question 14 (ICAI Study Material) Pg no._____

A firm purchased second hand machinery on 1st January, 2019 for ₹ 3,00,000, subsequent to which ₹ 60,000 and ₹ 40,000 were spent on its repairs and installation, respectively. On 1st July, 2020 another machinery was purchased for ₹ 2,60,000. On 1st July, 2021, the first machinery having become outdated was auctioned for ₹ 3,20,000 and on the same date, another machinery was purchased for ₹ 2,50,000.

On 1st July, 2022, second machinery was also sold off and it fetched ₹ 2,30,000. Depreciation was provided on machinery @ 10% on the original cost annually on 31st December, under the straight line method. Prepare the following accounts in the books of the company:

(i) Machinery Account for the years ending Dec. 31, 2019 to 2022 and (ii) Machinery Disposal Account

Question 15 (ICAI Study Material) Pg no._____

On April 1, 2019 a firm purchased a machinery for ₹ 2,00,000. On 1st October in the same accounting year, additional machinery costing ₹ 1,00,000 was purchased. On 1st October, 2020, the machinery purchased on 1st April 2019, having become obsolete was sold off for ₹ 90,000. On October 1, 2021, new machinery was purchased for ₹ 2,50,000 while the machinery purchased on 1st October 2019 was sold for ₹ 85,000 on the same day. The firm provides depreciation on its machinery @ 10% per annum on original cost on 31st March every year.

Show Machinery Account, Provision for Depreciation Account and Depreciation Account for the period of three accounting years ending March 31, 2022.

Question 16 Pg no._____

S & Co. purchased a machine for ₹1,00,000 on 1.1.2019 Another machine costing ₹1,50,000 was purchased on 1.7.2020. On 31.12.2021 the machine purchased on 1.1.2019 was sold for ₹50,000. The company provides depreciation at 15% on Written Down Value Method. The company closes its accounts on 31st December every year.

Prepare – (i) Machinery Account, (ii) Machinery Disposal Account and (iii) Provision for Depreciation Account.

Question 17 *(ICAI Study Material)* Pg no._____

Amazing group had Property, Plant & Equipment (PP&E) with a book value of ₹ 35,00,000 on 31st December 2022. The balance in Revaluation Surplus on that date was ₹ 3,00,000. As part of their practice of revaluing the assets on yearly basis, another revaluation was carried out on 31st December 2022. Evaluate the impact of Revaluation if the Fair Value as a result of Revaluation done on 31st December 2022 was (a) ₹ 37,00,000 (b) ₹ 33,00,000 and (c) ₹ 31,00,000. Also, give the journal entries.

Question 18 Pg no._____

B Ltd. owns an asset with an original cost of ₹ 2,00,000. On acquisition, management determined that the useful life was 10 years and the residual value would be ₹ 20,000. The asset is now 8 years old, and during this time there have been no revisions to the assessed residual value. At the end of year 8, management has reviewed the useful life and residual value and has determined that the useful life can be extended to 12 years in view of the maintenance program adopted by the company. As a result, the residual value will reduce to ₹ 10,000. How would the above changes in estimates be made by B Ltd.?

Question 19 Pg no._____

Entity A purchased an asset on 1st January 2016 for ₹ 1,00,000 and the asset had an estimated useful life of 10 years and a residual value of nil. On 1st January 2020, the directors review the estimated life and decide that the asset will probably be useful for a further 4 years. Calculate the amount of depreciation for each year, if company charges depreciation on Straight Line basis.

Question 20 *(CA Foundation Nov 2018)(4 Marks)/(RTP May 2020)/(May 2023)/(ICAI SM)* Pg no._____

A Plant & Machinery costing ₹ 10,00,000 is depreciated on straight line assuming 10 year working life and zero residual value, for four years. At the end of fourth year, the machinery was revalued upwards by ₹ 40,000. The remaining useful life was reassessed at 8 years. Calculate depreciation for the 5th year.

Question 21 *(ICAI Study Material)* Pg no._____

A Machine costing 6,00,000 is depreciated on straight line basis, assuming 10 years working life and Nil residual value, for three years. The estimate of remaining useful life after third year was reassessed at 5 years. Calculate depreciation for the fourth year.

Question 22 H/W Pg no._____

A property costing ₹ 10,00,000 is bought in 2020. Its estimated total physical life is 50 years. However, the company considers it likely that it will sell the property after 20 years.
The estimated residual value in 20 years' time, based on 2020 prices, is:
Case (a) ₹ 10,00,000 (NIL) Case (b) ₹ 9,00,000
You are required to compute the amount of depreciation charged for the year 2020

$\frac{10L-9L}{20} = 5000$ p.a

Question 23 *(CA Foundation Nov 2020) (5 Marks)* Pg no._____

Discuss the factors taken into consideration for calculation of depreciation.

Question 24 *(CA Foundation Dec 2022) (5 Marks)* Pg no._____

"The cost of Property, Plant and Equipment comprises of any cost directly attributable to bring the asset to the location and condition necessary for it to be capable of operating in a manner intended by the enterprise". Give any five examples of such 'directly attributable costs'.